

NOTES ON MEXICAN *PSILOPYGA* AND *OXYCNEMUS* (COLEOPTERA: NITIDULIDAE)¹

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ABSTRACT: Specific distributional data for *Psilopyga fasciata* in México is provided and new hosts records are included for *Oxycnemus rostratus*, and *P. fasciata* from México, and *P. histrina*, and *P. nigripennis* from the United States.

KEY WORDS: *Psilopyga*, *Oxycnemus*. Coleoptera, Nitidulidae.

The genus *Psilopyga* LeConte, 1853: 286 has been used as a synonym of *Oxycnemus* by some authors starting with LeConte and Horn (1883) and followed more recently by Parsons (1943).

Sharp (1891: 364) stated that "the two genera are, however, very distinct," an assertion that was supported in a phylogenetic analysis of these genera and other close relatives (Leschen 1999). At present, six species are included in this genus, whereas nine are included in *Oxycnemus*; both genera are represented in México by one species each (Spornraft 1971; Leschen 1999).

The purpose of this paper is to provide specific distributional data for *Psilopyga fasciata* in México and record for the first time the fungal hosts for this species and *Oxycnemus rostratus*.

Psilopyga fasciata Sharp, 1891: 364

Fig. 1

Psilopyga fasciata was described based on a single specimen collected by Truqui from México without specific locality (Holotype at British Museum, seen). It is easily recognized from the rest of North American species by the bicolored elytra: one-third to three-fifths of the base orange (as in the Holotype, cited by Sharp 1891), and the rest black. In his revision of the Nearctic Nitidulidae, Parsons (1943) recorded this species from Presscot, Arizona, USA, without specific host data, although the information available for other species, cited *Phallus impudicus* as the host for *Psilopyga histrina* (LeConte), and *P. nigripennis* (LeConte) (Parsons 1943) there are also new records for these species associated with *Mutinus elegans* (original data provided by R. Leschen from specimens collected in Arkansas. Specimens in his collection).

Material examined. México: Jalisco, Tenamaxtlan, Los Picachos-Tenamaxtlan, bosque mesófilo de montaña, 1820m, ex *Laternea columnata*, 22.VII.2000, J. Cortés (1♂, 1♀; Colección Entomológica del Centro de Estudios en Zoología, CZUG). United States: Arizona, Maricopa Co., Hwy. 260 at Preacher Canyon (~6 mi E of Star Vly), 14.VIII.1992, from *Phallus impudicus* (Phallaceae) (coll. W.B. Warner) (1 ♀; Florida State Collection of Arthropods, FSCA).

Three of the four species (including *P. fasciata*) from the United States are

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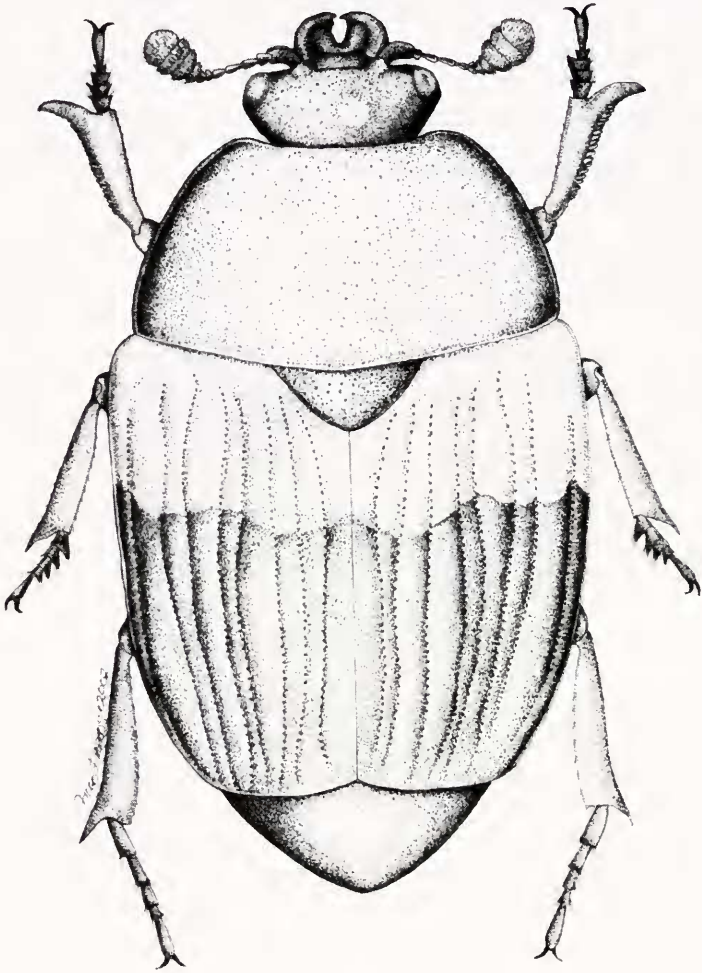


Fig. 1. Dorsal view of *Psilopyga fasciata* Sharp (male).

recorded from *Phallus impudicus* where this species is distributed primarily in temperate forest, but the single record from México includes a different host, *Clathrus columnatus* (Clathraceae) for this genus. Although the last record is from another host family, all of them belong to the Order Phallales.

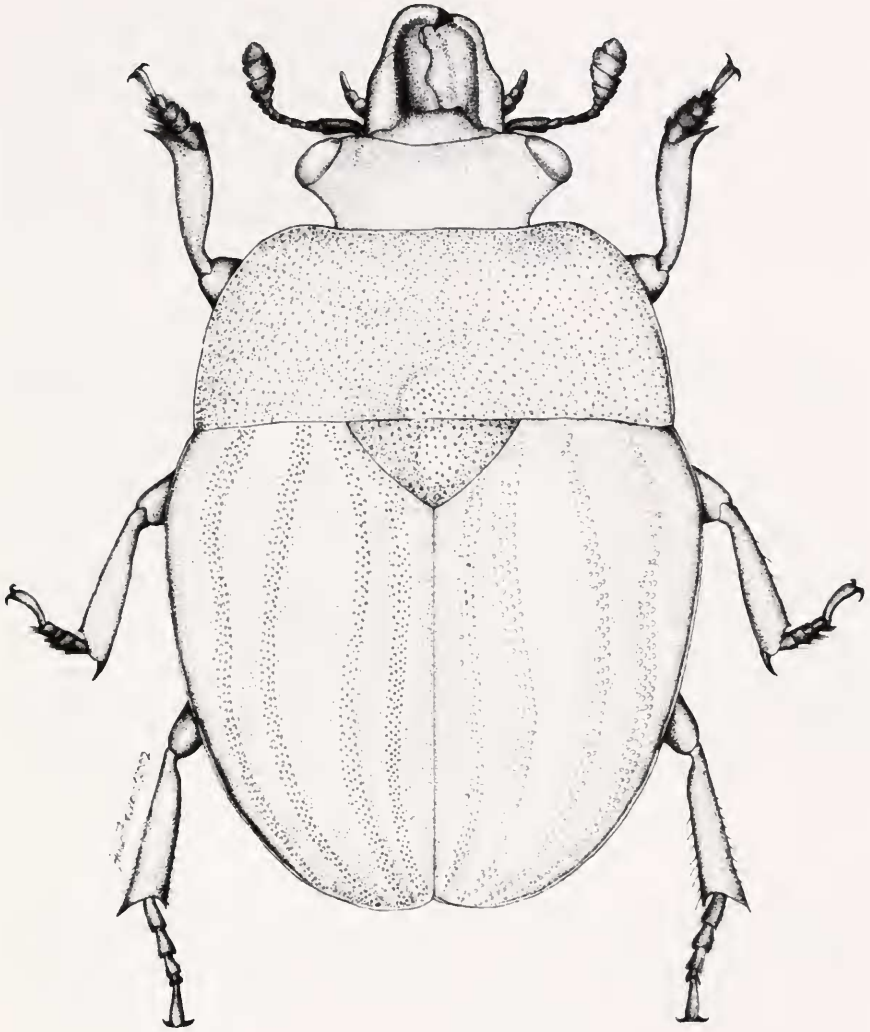


Fig. 2. Dorsal view of *Oxycnemus rostratus* Reitter (male).

Oxycnemus rostratus Reitter, 1873: 137

Fig. 2

Listed as *Oxycnemus rostratus* in Blackwelder (1945), this species is recorded from México (Veracruz), Guatemala, Nicaragua and Panamá. Known hosts for the species of this genus are: *Blumevania rhacodes*, *Dictyophora*, *Lysurus*

periphragmoides (Nouhra and Toledo 1994, cited also in Leschen 1999), and *Phallus impudicus* for *Oxycnemus lewisi* (Reitter) (Hayashi 1978).

Material examined: Veracruz, Catemaco, Dos Amates, 22.VIII.1992, *Dyctiophora indusiata* IV (Phallaceae), J. L. Navarrete-Heredia (1♂, 1♀; J.L. Navarrete-Heredia col., JLN); Veracruz, Cuauhtémoc, NTP-80 No. 5, 29.XII. 1991, J. R. Hernández (1♀; JLN). The fungal record agrees with those known for the genus. The single unusual finding for this species in carrion traps may be the result of chemical attraction instead of close association with carrion, due to their restricted association with Phallales (Leschen 1999).

DISCUSSION

Specimens of both species were collected during the day in the base of the fungi and inside the mature "mycoegg" (gelatinous egg structure, *sensu* Pegler and Gomez 1994), as is usual for these beetles. An interesting record of mycetophagids in the mycoeggs of *Linderiella rodrigueziana* (Clathraceae) from Costa Rica (Pegler and Gomez 1994) requires confirmation. Although the Mexican diversity of these genera is not high, México is the single country in the Western Hemisphere where both genera occur and represent the most southern (*Psilopyga*) and northern (*Oxycnemus*) distribution for these taxa. In México, *Psilopyga* species occur in montane areas and are associated with temperate mushrooms, but *Oxycnemus* is found primarily in localities with tropical influence and its species are associated with the single species of *Dyctiophora* which is tropical and subtropical in distribution (*D. indusiata*) (Guzmán *et al.* 1990). Due to their specific association with Phallales, additional collections of these clyodines would provide important information on their biology and fungal host use.

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